## **ABSTRACT**

A control device and measurement system for a living body applies lights of at least one wavelength in a visible-infrared region to a plurality of incident positions on a surface of the living body, and a light detector detects lights transmitted through the living body at a plurality of detection positions on the surface of the living body. An operation unit determines a type of output signal, based on an intensity of the transmitted light and pre-stored reference data, and outputs a signal indicative thereof as the type of output signal. An external equipment executes a functional operation according to the type of output signal from the operation unit. The incident positions and the detection positions are alternately disposed in square lattice form and middle points between the incident positions and detection positions adjacent to one another are defined as measurement positions.